

## **Appendix G-1**

### **Nutrition and Health Research Institutes and Dairy Foods Research Centers, 2003**

#### **Nutrition and Health Research Institutes**

##### **Diet, Genetics, and Heart Disease Institute**

Louisiana State University, Pennington Biomedical Research Center: Relationship of Low-Fat Diets to Heart Disease

##### **Genetics and Nutrition Institute**

Children's Hospital, Oakland Research Institute: Relationship of Genetics, Dietary Fat (Especially Dairy Fat), and Heart Disease

#### **Dairy Foods Research Centers**

##### **California Dairy Research Center**

(University of California–Davis and California Polytechnic State University–San Luis Obispo)  
Specializes in product technology development, ingredient technology, product health enhancement properties, food safety, and quality assurance.

##### **Minnesota/South Dakota Dairy Food Research Center**

(University of Minnesota–St. Paul and South Dakota State University–Brookings)  
Concentrates on natural and processed cheese functionality and flavor, fluid milk flavor and shelf life, genomics of probiotic bacteria, and utilization of acid and salt whey.

##### **Northeast Dairy Foods Research Center**

(Cornell University–Ithaca and University of Vermont–Burlington)  
Focuses attention on developing and improving processing technologies to enhance dairy product quality, safety, and functionality, improving the safety of foods and processing systems, and modifying dairy product composition to ensure that dairy foods and ingredients remain a part of a healthy diet.

##### **Southeast Dairy Foods Research Center**

(North Carolina State University–Raleigh and Mississippi State University–Starkville)  
Specializes in milk and whey ingredient functionality, thermal and biological processing, sensory properties of cheese and dairy ingredients, dairy food safety, and microbial technologies for starter cultures and probiotics.

##### **Western Dairy Center**

(Utah State University–Logan, Oregon State University–Corvallis, Washington State University–Pullman, and University of Idaho–Moscow)  
Specializes in cheese flavor and functionality, fluid milk processing, whey and milk utilization, and microbial genetics and physiology.

## **Appendix G-1, continued**

### **Wisconsin Center for Dairy Research**

(University of Wisconsin–Madison)

Explores functional flavor and physical properties of cheese and cheese products, whey and whey components, and milk components used as ingredients and as finished products, cheese making and whey processing and separation procedures, use of milkfat, and food safety and quality technology.

## **Appendix G-2**

### **Dairy Foods Competitive Research Activities, 2003**

#### **Principal Investigator, Institution, and Project Title**

**William R. Aimutis, Ph.D.** (Land O' Lakes): Physical and Biochemical Changes Associated with Shredded Cheese During Ripening [continued in 2003]

**Valente B. Alvarez, Ph.D.** (Ohio State University Research Foundation): Flavor Changes During Extended Shelf Life of PET Bottled Ultrapasteurized Milk [began in 2003]

**Polly Dinsmore-Courtney, Ph.D.** (Ohio State University Research Foundation): Control of Cheddar Cheese Ripening Via High Pressure Treatment [continued in 2003]; 5'-Nucleotide Monophosphate Flavor Enhancer Content in Aged Cheddar Cheese [began and completed in 2003]

**Susan E. Duncan, Ph.D.** (Virginia Polytechnic Institute): Controlled Release of Antioxidants Polymer Films into Milk [continued in 2003]; Polymeric Inhibition of Photosensitive Reactions of Milk Components [completed in 2003]

**Robert W. Hutkins, Ph.D.** (Virginia Polytechnic Institute): Utilization of Fructooligosaccharides by Probiotic Bacteria [continued in 2003]

**Michael E. Mangino, Ph.D.** (Ohio State University Research Foundation): Partial Denaturation to Improve Heat Stability of Whey Protein – Part II [continued in 2003]

**Joseph E. Marcy, Ph.D.** (Virginia Polytechnic Institute): Improved Uses of Natamycin to Prevent Mold Spoilage of Cheese [continued in 2003]; Active Packaging to Improve the Quality of UHT Milk [continued in 2003]; Ensuring Stability of Natamycin on Shredded Cheese to Prevent Mold Growth [began in 2003]

**John U. McGregor, Ph.D.** (Clemson University): Fluid Dairy Products as Ingredients in Freshly Prepared Coffee House [continued in 2003]; Enhancing the Shelf Life of Whole Milk Powder [continued in 2003]

**C. Morr** (Independent): Development of a Membrane Fractionation Scheme for Producing Lactose-Reduced Milk [began and completed in 2003]

**Ronald L. Richter, Ph.D.** (Texas A&M University): Effects of Formulation and Processing on the Emulsion Stability and Sedimentation of Retort Sterilized Dairy-Based Nutritional Products–Part II [continued in 2003]; Control of Properties/Stability of High Whey Protein Concentration Retorted Beverages [began in 2003]

## **Appendix G-2, continued**

**K. Schmidt, Ph.D.** (Kansas State University): Ingredient Technology and Interactions for Stable, Nutritionally Designed Milk-Based Beverages [began in 2003]

**Richard L. Stroshine, Ph.D.** (Purdue Research Foundation): Low Field Proton Magnetic Resonance for On-Line Monitoring of the Moisture Content of Processed Cheese and Other Dairy Products [continued in 2003]

**Margaret Swearingen, Ph.D.** (Land O' Lakes): Calcium Lactate Levels and Incidence of Crystals on Cheddar Cheese [continued in 2003]

## **Appendix G-3**

### **Nutrition Competitive Research Activities, 2003**

#### **Principal Investigator, Institution, and Project Title**

**Dale E. Bauman, Ph.D.** (Cornell University): Effect of Milkfat Derived Trans Fatty Acids on Changes in Plasma Lipoproteins Related to the Development of CHD [began in 2003]

**Jean Harvey-Berino, Ph.D.** (University of Vermont): Can Dairy Enhance Weight Loss? [continued in 2003]

**Leann L. Birch, Ph.D.** (Pennsylvania State University): Parental Influence on Girls' Calcium Intake and Bone Mineral Content and Weight Status [continued in 2003]; Parental Influence on Girls' Calcium Intake and Bone Mineral Content and Weight Status—Phase II [began in 2003]

**Terri D. Boyston, Ph.D.** (Iowa State University): Development of a Yogurt with Increased CLA Content Produced with Probiotic Bacteria—Part II [completed in 2003]

**Gary M. Chan, M.D.** (Children's Medical Center Foundation): The Effects of Dairy Foods on Adolescent Pregnant Mothers and Their Newborns [continued in 2003]

**Joseph Donnelly, Ph.D.** (University of Kansas Center for Research, Inc.): The Effects of Dairy Intake on Weight Management and Metabolic Profile [began in 2003]

**Adam Drewnowski, Ph.D.** (University of Washington): New Measures of Nutrient Density and Nutrient Content Cost [began in 2003]

**Penny Kris-Eatherton, Ph.D.** (Pennsylvania State University): Effects of a Dairy-Rich Diet on Blood Pressure and Vascular Reactivity [continued in 2003]; Role of LDL and HDL Particle Size in Response to Diet Susceptibility to Oxidative Modification [began in 2003]

**Christine Eonomos, Ph.D.** (Tufts University): What Predicts Dairy Intake, Bone Mass, and Body Composition in Early Children [began in 2003]

**Rafael Jiminez-Florez, Ph.D.** (California Polytechnic State University Foundation): Isolation of Milk Membrane Components from Buttermilk and their Impact on Health [completed in 2003]

**Steve Heymsfield, Ph.D.** (St. Luke's-Roosevelt Hospital): The Effect of a Mixed Nutrient Versus a Single Nutrient Beverage on Energy Metabolism, Substrate Oxidation, and Indices of Satiety and Food Intake in Children [began in 2003]

**Steve Hertzler, Ph.D.** (Ohio State University): Colonic Bacterial Adaptation to Lactose in African-American Maldigesters [continued in 2003]

### Appendix G-3, continued

**James Hill, Ph.D.** (University of Colorado): Role of Dairy Products in Promoting Fat Oxidation in Humans [continued in 2003]

**Bess Dawson-Hughes, Ph.D.** (Tufts University): Dietary Protein and Calcium Homeostasis: Impact of Aromatic Versus Branched-Chain Amino Acids on Urinary Calcium Excretion [began in 2003]

**Clement Ip, Ph.D.** (Roswell Park Cancer Institute): Mammary Cancer Prevention by CLA-Butter [continued in 2003]

**Jeanette Newton-Keith, M.D.** (University of Chicago): Misperceptions of Lactose Intolerance in African Americans [began in 2003]

**Teresa A. Marshall, Ph.D.** (University of Iowa): Assessment of Associations Between Consumption of Milk and Milk Products and Growth and Body Composition in the Young Child [continued in 2003]

**Velmir Matkovic, Ph.D.** (Ohio State Research Foundation): pQCT of the Forearm in Children with Fractures [continued in 2003]; Traits in Body Composition in Young Females Consuming Dairy Products [began and completed in 2003]

**J. Metz, Ph.D.** (Oregon Health Sciences University): Lowfat Dairy Products Reduce Anti-hypertensive Drug Therapy—Phase II [began in 2003]

**Vikram V. Mistry, Ph.D.** (South Dakota State University): Effect of Processed Cheese With and Without Vitamin D<sub>3</sub> on Vitamin D Status, Parathyroid Hormone, and Bone Turnover in the Elderly [continued in 2003]

**Lynn L. Moore, Ph.D.** (Boston University School of Medicine): Effects of Milk and Milk Products on Changes in Body Fat and Risk of Obesity Throughout Childhood [continued in 2003]; The Effect of Dietary Calcium on Body Fat Levels in Children and Adults [began in 2003]; and Dairy Intake: Its Determinants and Relation to a Healthy Diet Throughout Childhood [began in 2003]

**Aviva Must, Ph.D.** (Tufts University): Influence of Milk and Milk Products Consumption on Incident Obesity and Changes in Children, Adolescents, and Young Adults [completed in 2003]; 3-A-Day of Dairy: Related Dietary and Behavioral Factors in Adolescent Girls [began in 2003]

## Appendix G-3, continued

**Theresa A. Nicklas, Ph.D.** (Baylor College of Medicine): Environmental Influences on Children's Consumption of Dairy Products–Family Environment [continued in 2003]; Dietary Calcium Intake and Dairy Product Consumption by Children and Young Adults–Nutritional Impact and Health Outcomes [began in 2003]; and Environmental Influences on Children's Food Consumption, Specifically Dairy Products–Day Care Environment [began in 2003]

**Stuart Phillips, Ph.D.** (McMaster University): Effectiveness of Milk and Soy in the Promotion of an Anabolic Environment to Maximize Increase in Exercise-induced Muscle Protein Balance [completed in 2003]; The Effectiveness of Milk Consumption in the Promotion of Resistance Training-induced Lean Mass Gains in Novice Weightlifters [continued in 2003]

**J. Story, Ph.D.** (Purdue Research Foundation): Regulation of Cholesterol Metabolism by CLA-Rich Milkfat [began and completed in 2003]

**Debra Sullivan, Ph.D.** (University of Kansas Medical Center): Effects of Increased Dairy Product Consumption on Blood Pressure in Multi-Ethnic Population of Elementary School Children [continued in 2003]; Synergistic Effect of Dairy Foods on Metabolism–A Mechanistic Study [began in 2003]

**Dorothy Teegarden, Ph.D.** (Purdue Research Foundation): Effect of Calcium Education Intervention on Body Fat Mass in Adolescents [continued in 2003]

**Warren Thompson, M.D.** (The Mayo Clinic): Effects of High Dairy, High Fiber, Low Glycemic Index, Low Energy Density Diet on Weight, Body Fat, and Glucose Tolerance [continued in 2003]

**Kevin Tipton, Ph.D.** (University of Texas): Stimulation of Muscle Anabolism by Milk Following Resistance Exercise [began and completed in 2003]; The Effectiveness of Milk Consumption in Promotion of Training-induced Lean Mass Gains in Novice Weightlifters [began in 2003]

**John P. Vanden Heuvel, Ph.D.** (Pennsylvania State University): Modulation of Diabetes by Conjugated Linoleic Acid [completed in 2003]

**Michael B. Zemel, Ph.D.** (University of Tennessee Research Foundation): Role of Whey Proteins in Enhancing the Anti-obesity Effects of Calcium [completed in 2003]; Role of Dairy Foods in Reducing Body Fat and Enhancing Weight Loss in African-American Adults [continued in 2003]; Role of Dairy Products in Weight Loss: A Multi-Center Trial [continued in 2003]; Role of Dairy Products in Weight Maintenance [began in 2003]; and Effects of Calcium-Rich Dairy Products on Body Composition and Weight Loss in African-American Adults [began in 2003]